

● PRINTER RUSH ●
(PTO ASSISTANCE)

Application: 10/007 153 Examiner: File GAU: 2634

From: PAP Location: IDC FMF FDC Date: 12/12/05

Tracking #: EPM 10 007153 Week Date: 7/19/05

DOC CODE	DOC DATE	MISCELLANEOUS
<input type="checkbox"/> 1449	<hr/>	<input type="checkbox"/> Continuing Data
<input type="checkbox"/> IDS	<hr/>	<input type="checkbox"/> Foreign Priority
<input type="checkbox"/> CLM	<hr/>	<input type="checkbox"/> Document Legibility
<input type="checkbox"/> IIFW	<hr/>	<input type="checkbox"/> Fees
<input type="checkbox"/> SRFW	<hr/>	<input type="checkbox"/> Other
<input type="checkbox"/> DRW	<hr/>	
<input type="checkbox"/> OATH	<hr/>	
<input type="checkbox"/> 312	<hr/>	
<input checked="" type="checkbox"/> SPEC	<u>12/04/01</u>	

[RUSH] MESSAGE: Please supply missing Ser. No. and date from page 1, line 4 of the Specification.

Thank you.

[XRUSH] RESPONSE:

See misc comm

Dale

INITIALS: SP

NOTE: This form will be included as part of the official USPTO record, with the Response document coded as XRUSH.
 REV 10/04

To: **Rori Burch - Publishing Division** Total Pages Sent: 3
Facsimile Number: **571-273-9009**

From: **Carlton H. Hoel**
Texas Instruments Incorporated
Facsimile: 972-917-4418
Phone: 972-917-4365

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: **Aris Papasakellariou**
Serial No: **10/007,153**
Filed: **12/4/2001**
Art Unit: **2634**
Examiner: **E. File**
Docket No.: **TI-32538**
Conf. No.: **1130**
Customer No.: **23494**

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being transmitted by facsimile to the U.S. Patent and Trademark Office at **571-273-9009** on the date shown below:

Gracia Sansom
Gracia Sansom

1-30-06
Date

FACSIMILE COVER SHEET

<input checked="" type="checkbox"/> FACSIMILE COVER SHEET (1 SHEET)		<input type="checkbox"/> AMENDMENT
<input type="checkbox"/> NEW APPLICATION		<input type="checkbox"/> EOT
<input type="checkbox"/> DECLARATION		<input type="checkbox"/> NOTICE OF APPEAL
<input type="checkbox"/> ASSIGNMENT		<input type="checkbox"/> APPEAL
<input type="checkbox"/> FORMAL DRAWINGS		<input type="checkbox"/> ISSUE FEE
<input type="checkbox"/> INFORMAL DRAWINGS		<input type="checkbox"/> REPLY BRIEF (IN TRIPPLICATE)
<input type="checkbox"/> CONTINUATION APP'N		<input checked="" type="checkbox"/> Notice to File Corrected Application Papers
<input type="checkbox"/> DIVISIONAL APP'N		
NAME OF INVENTOR(S):		
Aris Papasakellariou		
TITLE OF INVENTION:		
Spreading Factor Estimation System and Method		
TI FILE NO.:	DEPOSIT ACCT. NO.:	
TI-32538	20-0668	
FAXED: 01/30/2006		
ATTY/SECY: CHH/gs		
RECEIPT DATE & SERIAL NO.:		
Serial No.: 10/007,153		
Filing Date: 12/4/2001		
Conf. No.: 1130		

This facsimile is intended only for the use of the address named and contains legally privileged and/or confidential information. If you are not the intended recipient of this telecopy, you are hereby notified that any dissemination, distribution, copying or use of this communication is strictly prohibited. Applicable privileges are not waived by virtue of the document having been transmitted by Facsimile. Any misdirected facsimiles should be returned to the sender by mail at the address indicated on this cover sheet.

Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, TX 75265



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Serial Number
10007153

Date Mailed
12/28/05

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Notice of Allowance Mailed

This application has been accorded an Allowance Date and is being prepared for issuance. The application, however, is incomplete for the reasons below.

Applicant is given 30 days from the mail date of this Notice within which to correct the informalities indicated below. A failure to reply will result in the application being ABANDONED. This period for reply is NOT extendable under 37 CFR 1.136 (a) or (b).

- ♦ Specification page 1, line 4 serial number and filing date missing. Fax missing information to number below or e-mail.
 - For status updates visit <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR System, contact the Electronic Business Center (EBC) toll free at 866-217-9197.

APPLICANT MUST SUPPLY MISSING INFORMATION WITHIN 30 DAYS OF THE MAIL DATE OF THIS NOTICE.

A copy of this notice MUST be returned with the reply. Please address response to Commissioner for Patents P.O. Box 1450
Alexandria, VA 22313-1450


Rori Burch
USPTO
Publishing Division
Rori.burch@uspto.gov
Fax (571) 273-9009
Fax (703) 308-6642
703-305-0333 ext.135 (V)

SPREADING FACTOR ESTIMATION SYSTEM AND METHOD

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority from provisional applications: Serial No. 60/263,669, filed 01/23/01. The following patent applications disclose related subject matter: Serial Nos. 09/....., filed (). These referenced applications have a common assignee with the present application.

BACKGROUND OF THE INVENTION

The invention relates to electronic communications, and more particularly to CDMA-based coding, transmission, and decoding/synthesis methods and circuitry.

Code division multiple access (CDMA) coding has been extensively used in such applications as cellular and satellite communications. CDMA signals increase the spectrum required for the transmission at a particular data rate by modulating each data symbol with a spreading code having a rate larger than the data rate. The same spreading code is used for each data symbol. Typically, the spreading code comprises of a few tens or a few hundreds of elements, called chips. To decrease the correlations among spreading codes assigned to different users, and thereby reduce the interference among different users, the data stream after spreading is typically scrambled with a pseudo-noise (PN) code that is generated serially and cyclically and has a larger period than the spreading code. Examples of such CDMA signal spreading are the schemes used by the IS-95/CDMA2000 and 3GPP systems.

With CDMA, the signals from all users simultaneously occupy the same frequency band, and the receiver separates the multiple signals by exploiting the crosscorrelation properties of the spreading and scrambling codes that are applied to each user's signal. The receiver attempts to match in time the spreading and scrambling codes of the desired signal with a replica of these codes. Only then the demodulation result is meaningful; otherwise it appears noise-like. Thus, if the arriving signals have different codes or different code offsets, they can be discriminated at the receiver. The CDMA code for each user is typically produced as the modulo-2 addition of a Walsh code with a pseudo-random code (two pseudo-